

# Twelve Steps to a Sustainable High School

## 1. Teaching

Through education and training, schools can prepare students for a lifetime of sustainable living.

- Strengthen and prioritize environmental studies in your school
- Teach energy and environmental literacy to all students
- Increase opportunities for using the school physical plant and administrative operations as a "learning lab" for students
- Develop community energy and environmental education programs, include families in curriculum exercises, and facilitate dialogue about energy and environmental issues at home and the community



**"It's not easy being green!"**  
*Kermit T. Frog*

## 2. Purchasing and Administrative Services

School systems are large-scale consumers and can use their buying power to encourage demand for environmentally responsible products.

- Implement an environmentally-friendly products purchasing policy, i.e., buy only products that are durable, reusable, recyclable, made of recycled materials, non-hazardous, energy efficient, harvested in a sustainable manner, and produced using environmentally sound methods
- Investigate how your school can utilize state contracting and purchasing to buy "green" products.



## 3. Solid Waste Reduction and Recycling



School systems generate large amounts of solid waste, which is disposed of in costly and environmentally irresponsible ways. By implementing a comprehensive recycling and waste reduction programs, schools can minimize their waste stream.

- Establish a waste reduction ethic in all areas by carrying out waste stream analyses that determine recycling potential
- Implement a recycling program that starts with paper and cardboard and expands to metal, plastic and glass
- Isolate and recycle tires, batteries, oil, electronics, and scrap metal
- Compost organic waste
- Isolate and recycle hazardous waste-containing products, such as fluorescent lamps and ballasts, anti-freeze, solvents, batteries, computer monitors, and TVs
- Establish programs recycling computer printer cartridges
- Seek to recycle at least 50% of school waste stream



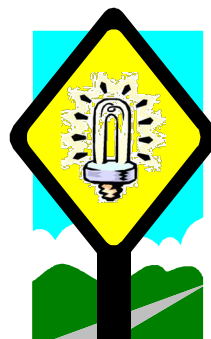
Connecticut Energy Education  
[www.ctenergyeducation.com](http://www.ctenergyeducation.com)

Institute for Sustainable Energy 1  
at Eastern Connecticut State University  
[www.sustainenergy.org](http://www.sustainenergy.org)

## 4. Energy Conservation

Energy budgets constitute a large portion of the operation costs of many school systems. Many new technologies can allow schools to control and manage these costs more effectively.

- Create databases that document energy use and cost
- Benchmark buildings against ENERGY STAR® standards
- Identify and complete energy conservation projects
- Promote programs to install “energy mizer” power savers on school vending machines
- Promote the linkage of energy conservation efforts to programs that reduce greenhouse gas emissions and identify how such programs have eased global warming



## 5. Energy Purchasing

School systems are large-scale electric consumers and can minimize their environmental impact by implementing power saving technologies and utilizing renewable energy sources.

- Structure energy purchases to enhance your conservation program
  - Consider buying the school's electric energy from a provider who uses renewable sources such as solar, wind, hydro and biofuel
  - Use energy efficient measures and cost management technology to flatten the campus load profile, improve the load factor and lower overall electric rates
  - Phase out the use of high-emission fuels and transition to a power plan that includes renewable energy sources



## 6. Water and Waste Water

School systems consume large amounts of water on a daily basis. By adopting “green” practices, schools can reduce their intake of water and outflow of pollutants.

- Implement water conservation programs to repair leaks and replace or retrofit inefficient plumbing fixtures
- Protect ground water and storm run-off by minimizing use of salt for ice-melting
- Use drought-resistant plantings and minimize irrigation unless using captured rainwater
- Promote the use of the school grounds as a learning laboratory for environmental and biology classes to investigate indigenous species and habitat patterns



## 7. Hazardous Materials

School systems produce and use many toxic substances, and are obligated by governmental regulations to dispose of and handle these substances properly. By implementing environmentally friendly products, schools can reduce costs and limit environmental impact on and off campus.

- *Meet or exceed legal "haz mat" handling, collection, disposal and tracking requirements*
- *Educate campus hazardous waste generators about minimization and proper disposal techniques*
- *Develop a hazardous chemical tracking or inventory database*
- *Implement a "chemical swapping" program for classroom chemicals*
- *Switch to non/least toxic paints, solvents and cleaning agents*
- *In print shop, switch to soy-based inks*
- *Use integrated pest management techniques to minimize or eliminate use of pesticides*
- *Recycle and recover ozone-depleting CFCs*
- *Avoid chlorine-based products and incineration of plastics*

## 8. Transportation

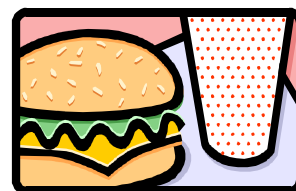
New technologies give school systems many options when addressing their transportation needs. They can reduce greenhouse gas emissions by reducing the number of bus trips on campus and by buying "green" vehicles when upgrading their vehicle fleet.



- *Encourage travel by carpooling, public transportation, bicycling, and walking*
- *Convert bus fleets to hybrid or alternative fuels such as natural gas, electric, or biodiesel*
- *Implement "no idling" programs in bus and car wait zones*

## 9. Food and Food Services

School students consume large quantities of food in cafeterias. Schools should use healthy environmental practices when developing their food service plans.

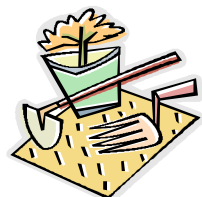


- *Buy regional produce in season*
- *Support local organic farms*
- *Advocate the health and environmental benefits of less meat consumption and eating "low on the food chain"*
- *Promote healthy snacks in school vending machines*
- *Minimize the use of disposable dinnerware*



## 10. Campus Grounds and Land Use

Many school systems have different school campuses that encompass numerous acres and ecosystems. The concepts of sustainable development should be incorporated into campus designs to preserve and study these diverse ecosystems.



- *Redefine campus beauty*
- *Reduce lawn areas and grass cutting*
- *Promote "natural succession" for extraneous lawn areas*
- *Protect woodland, wetland, watershed, and wildlife areas*
- *Implement a tree protection policy*
- *Plant native species*

## 11. New Construction

Many school systems are frequently upgrading and expanding their facilities. They can save money and diminish their environmental impact by using new energy efficiency and waste management technologies during these upgrades.

- *Utilize sustainable or green design principles for all new construction and rehabs*
- *Strive for high performance standards such as Leadership in Energy and Environmental Design (LEED) or Collaborative for High Performance Design (CHPs) in new buildings*
- *Design for state-of-the-art energy efficiency and exceed energy codes*
- *Incorporate renewable energy technologies, including daylighting and passive solar*
- *Include a suitable recycling collection space in building design programs*
- *Specify environmentally friendly building materials and products*
- *Evaluate options based on life cycle analyses and building commissioning*

## 12. Campus Planning and Design

School systems need to develop long-term plans that incorporate sustainable principles. By doing this they can save money and reduce environmental impact.

- *Develop school master plans that minimize negative impacts and disruption of natural ecosystems and surroundings*
- *Preserve and enhance green spaces Protect natural areas from development*
- *Concentrate buildings and arrange campus walkways and roads to minimize driving and create a campus that is convenient for pedestrians and bicycles*
- *Use water-efficient, indigenous plantings landscape for energy efficiency and aesthetics*

